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Anmelder/Applicant/Demandeur/Patentinhaber/Proprietor/Titulaire
O-Oka Corporation

COMMUNICATION

The European Patent Office herewith transmits as an enclosure the European search report for the above-mentioned European patent application.

If applicable, copies of the documents cited in the European search report are attached.

☒ Additional set(s) of copies of the documents cited in the European search report is (are) enclosed as well.

The following specifications given by the applicant have been approved by the Search Division:

☐ abstract

☒ title

☒ The abstract was modified by the Search Division and the definitive text is attached to this communication.

The following figure will be published together with the abstract: 1F

REFUND OF THE SEARCH FEE

If applicable under Article 10 Rules relating to fees, a separate communication from the Receiving Section on the refund of the search fee will be sent later.





DOCUMENTS CONSIDERED TO BE RELEVANT

Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (Int.Cl.7)
X	EP 0 581 483 A [✓] (O OKA FORGE CO LTD) 2 February 1994 (1994-02-02) * column 5, line 10 - column 6, line 1; figures 1-3 *	1-7	B21K1/30 F16H55/17
X	EP 0 949 435 A [✓] (MITSUBISHI STEEL MFG) 13 October 1999 (1999-10-13) * column 3, line 1-32; figure 1 * * column 5, line 50 - column 6, line 5 *	1-7	
A	US 6 276 180 B1 [✓] (HONEGGER HAND-RUEDI ET AL) 21 August 2001 (2001-08-21) * figure 11 *	4,6	
			TECHNICAL FIELDS SEARCHED (Int.Cl.7)
			F16H B21K B23P
The present search report has been drawn up for all claims			
Place of search		Date of completion of the search	Examiner
MUNICH		23 January 2004	Augé, M
CATEGORY OF CITED DOCUMENTS			
X : particularly relevant if taken alone Y : particularly relevant if combined with another document of the same category A : technological background O : non-written disclosure P : intermediate document T : theory or principle underlying the invention E : earlier patent document, but published on, or after the filing date D : document cited in the application L : document cited for other reasons & : member of the same patent family, corresponding document			

**ANNEX TO THE EUROPEAN SEARCH REPORT
ON EUROPEAN PATENT APPLICATION NO.**

EP 03 01 6043

This annex lists the patent family members relating to the patent documents cited in the above-mentioned European search report. The members are as contained in the European Patent Office EDP file on
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23-01-2004

Patent document cited in search report		Publication date		Patent family member(s)	Publication date
EP 0581483	A	02-02-1994	JP	2832325 B2	09-12-1998
			JP	6031373 A	08-02-1994
			CA	2100309 A1	15-01-1994
			DE	69311644 D1	24-07-1997
			DE	69311644 T2	15-01-1998
			EP	0581483 A1	02-02-1994
EP 0949435	A	13-10-1999	JP	3195771 B2	06-08-2001
			JP	11294481 A	26-10-1999
			EP	0949435 A2	13-10-1999
US 6276180	B1	21-08-2001	DE	19744639 A1	18-02-1999
			AT	213978 T	15-03-2002
			DE	59803295 D1	11-04-2002
			WO	9908820 A1	25-02-1999
			EP	1003619 A1	31-05-2000
			ES	2170524 T3	01-08-2002
			JP	2002528273 T	03-09-2002



ABSTRACT / ZUSAMMENFASSUNG / ABREGE

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A clutch gear having a boss part with a spline (13) which is formed on an outer peripheral surface of the boss part formed on an axial end surface of the clutch gear having jaw clutch teeth (12) formed on an outer peripheral surface thereof, in which the boss part, with the spline (13) formed on outer peripheral surface thereof, is formed integrally and coaxially with the clutch gear having the jaw clutch teeth (12) formed on the outer peripheral surface thereof by forging, the diameter of the boss part is shorter than that of the clutch gear, and an end part of an effective portion of the spline (13) comes to at least an end surface of the clutch gear.